



# The Impact of Manager Changes on Fund Performance

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# Motivation

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- Studies on performance of fund managers are widespread
- Little evidence on influence of gender on fund management
- Little evidence about how manager change influences the performance of a fund
- No evidence if the impact of manager change is different across different categories of funds
- No evidence from the UK market



# Objective

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- To fill the gap in the literature by offering a comprehensive study of fund manager changes and gender influences in different types of funds in the UK
- To examine the persistence of the top performing funds compared with the bottom performing funds pre-and post management change
- This paper presents the first evidence of the effect of fund management changes in the UK's fund management industry



# Existing Evidence

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- Is there positive correlation between fund manager performance and their experience and education? Chevalier and Ellison (1999) - **YES!**
- Do female fund managers outperform male? Atkinson et. al (2003) – **NO!** Bliss and Potter (2002) – **YES!**
- Does Style of investing matter? Carhart (1997) and Daniel et.al (1997) – **YES!**
- Is there persistence in performance? Quigley and Siquedied (1998) – **YES** for 'losers' and **NO** for 'winners'. Blake and Timmerman (1998) – **YES!** Carhart (1997) – **NO!**



# Data

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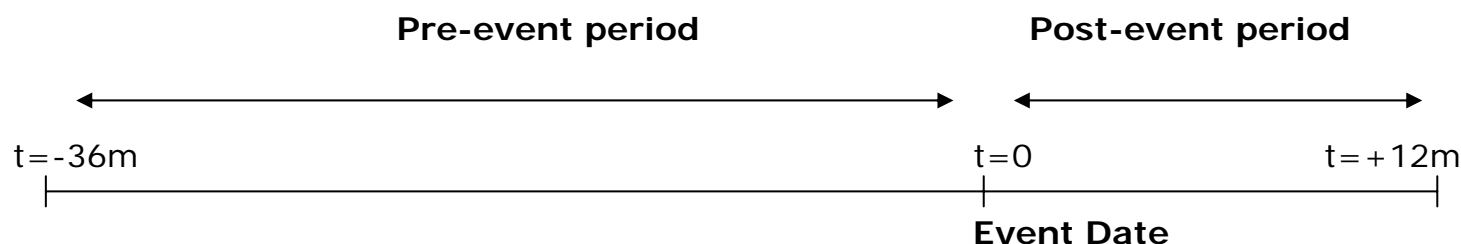
- Databases used to construct a unique dataset of 258 fund manager changes:
  - Citywire
  - S&P database for manager replacements
  - Financial Express Database
  - Various websites
- Price data for funds and their respective benchmarks is from Datastream
- Peer group benchmarks are from IMA
- Period analysed: April 2002-December 2005



# Method – Event Study

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- Event definition: Fund manager change
- Time line:



- Monthly data: to examine longer term impact of the change
- Funds split into: 1) male managed, 2) female managed, 3) emerging markets, 4) developed markets, 5) value, 6) growth, 7) small cap, 8) top 10% and 9) bottom 10% of funds according to pre-event performance



# Method – Event Study

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- Measuring abnormal performance:

Method I - Benchmark-adjusted model:  $AR_{it} = R_{it} - R_{bt}$

As a benchmark we use i) benchmark index defined by the investment objectives of a fund and ii) peer group benchmark

Method II - Mean-adjusted model:  $AR_{it} = R_{it} - \bar{R}_i$

Where  $\bar{R}_i$  is the mean return of fund i over the pre-event estimation period

- Average abnormal and cumulative average abnormal returns for Method I and II are obtained as:

$$\overline{AR}_t = \frac{1}{n} \sum_{i=1}^n AR_{it} \quad \text{and} \quad \overline{CAR}_{it} = \sum_{t=-36}^{+12} \overline{AR}_{it}$$



# Method – Event Study

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- Measuring abnormal performance:

Method III - Performance using pre-event and post-event Information Ratio (IR):

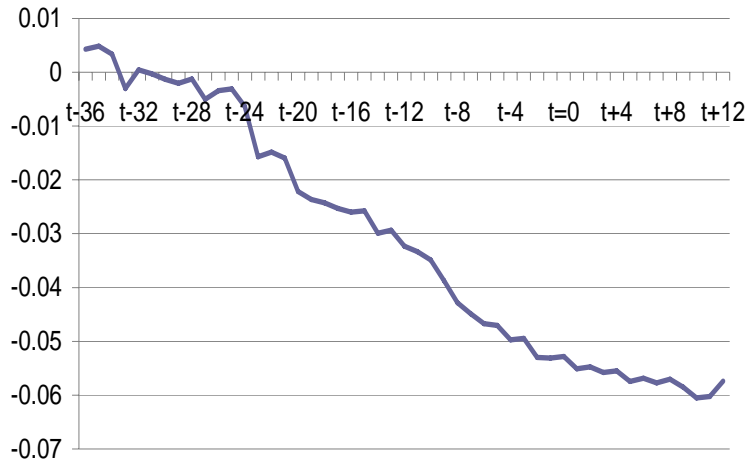
$$IRi_{t<0} = \frac{\bar{Ri}_{t<0} - \bar{Rb}_{t<0}}{St.Deviation (Ri_{t<0} - Rb_{t<0})} \text{ and } IRi_{t>0} = \frac{\bar{Ri}_{t>0} - \bar{Rb}_{t>0}}{St.Deviation (Ri_{t>0} - Rb_{t>0})}$$

NB: Calculation of IRs is based on the benchmark defined by fund objectives

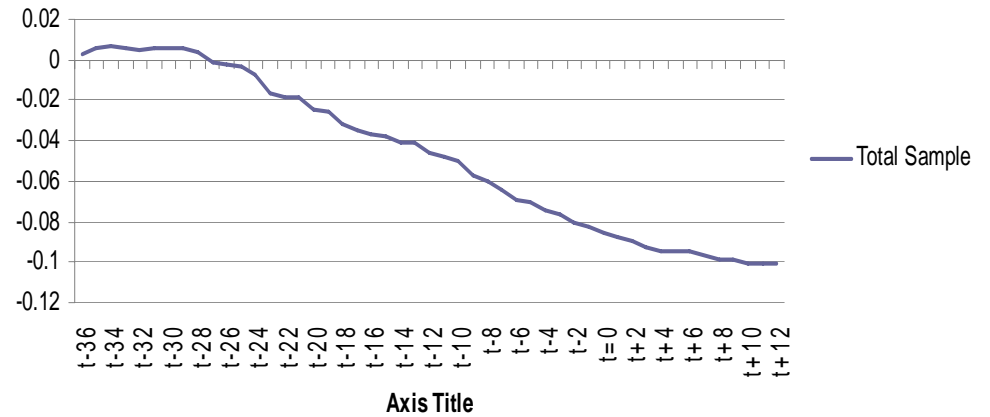
- To avoid any fund-specific bias we calculate the average IRs in the pre-event and post-event period for each of the fund groups.

# The Findings – All Funds

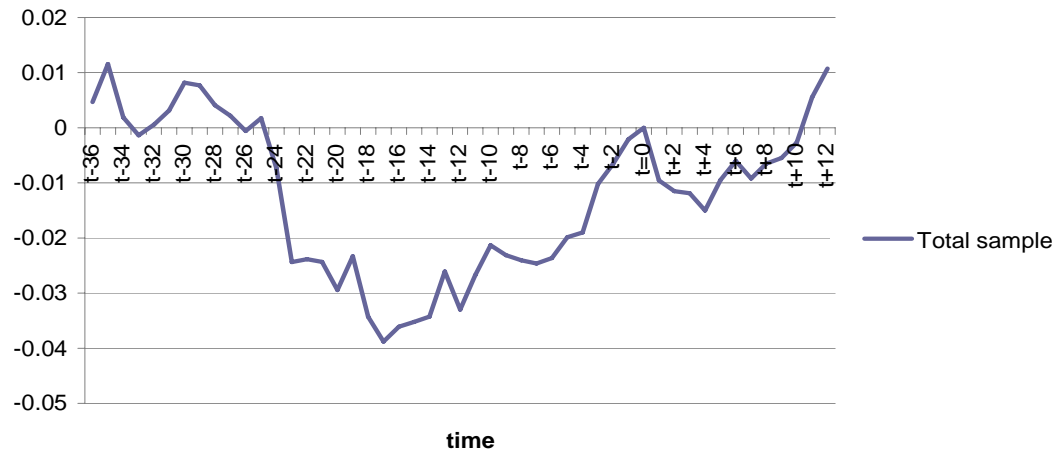
**Figure 1: Benchmark-adjusted Cumulative Average Abnormal Returns - All Funds**



**Figure 2: Peer Group-Adjusted Cumulative Average Abnormal Returns - All Funds**



**Figure 3: Mean-Adjusted Cumulative Average Abnormal Returns - All Funds**



# The Findings – Male vs. Female Managed Funds

Figure 4: Male vs. Female Managed Funds - Benchmark Adjusted Cumulative Average Abnormal Returns

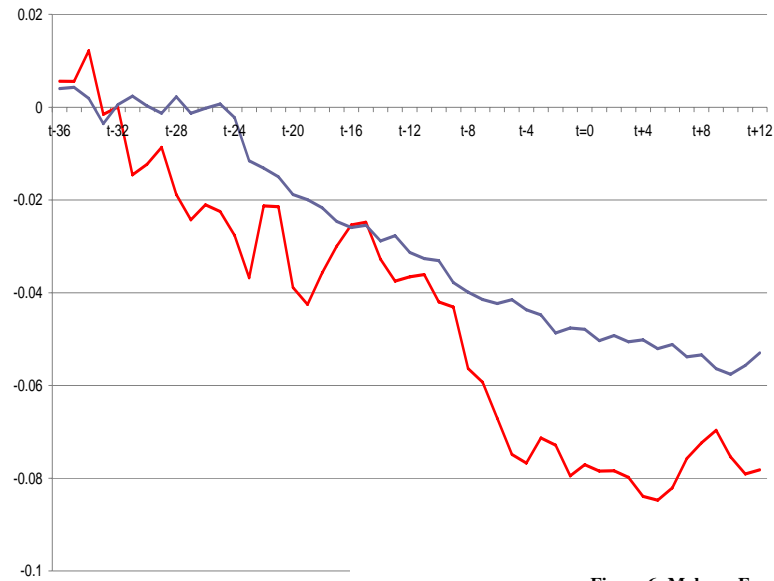


Figure 5: Male vs Female Managed Funds - Peer Group-Adjusted Cumulative Average Abnormal Returns

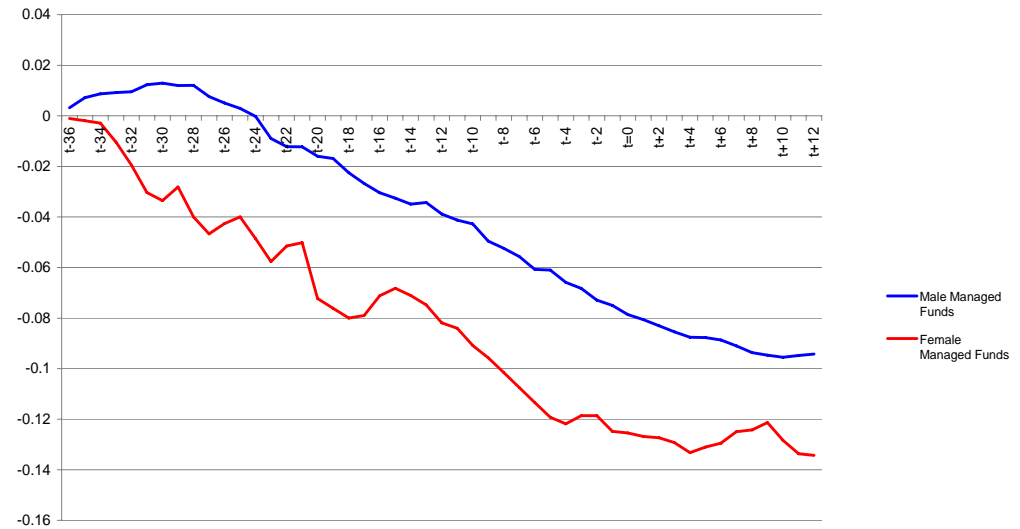
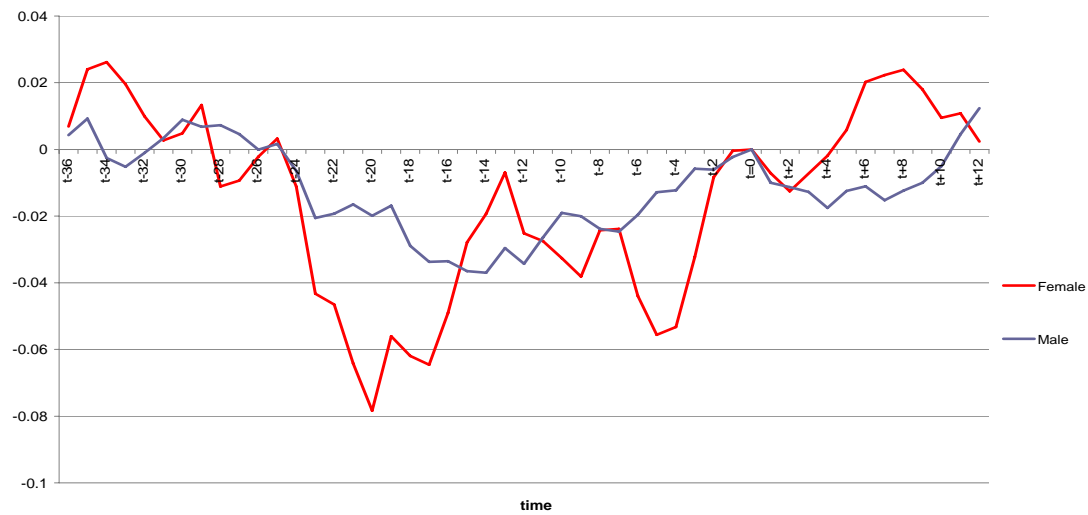
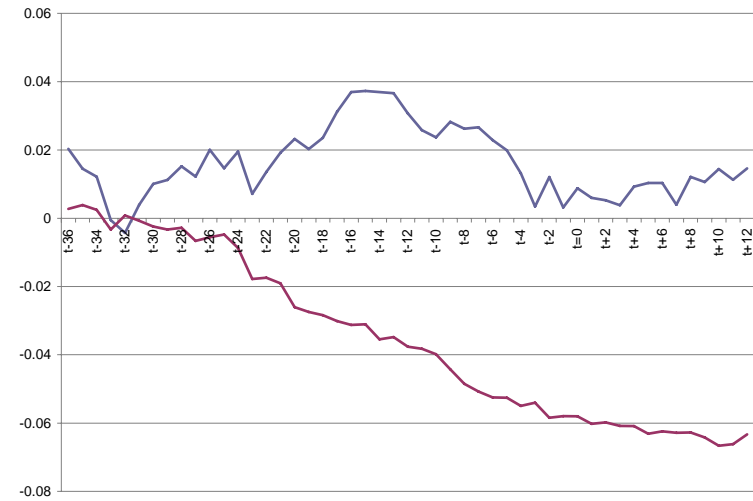


Figure 6: Male vs. Female Managed Funds - Mean Adjusted Cumulative Returns

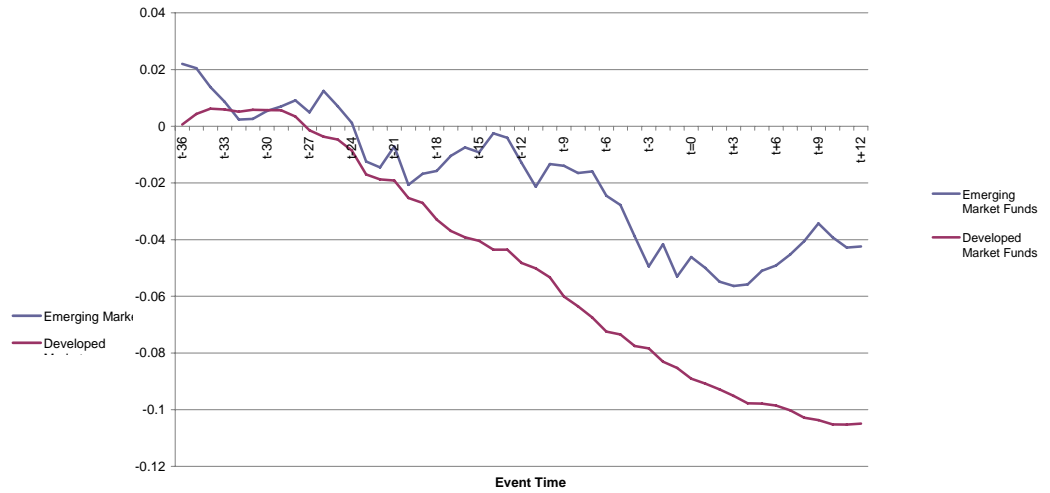


# The Findings – Emerging vs. Developed Markets Funds

**Figure 7: Emerging vs. Developed Markets Funds -Benchmark-Adjusted Cumulative Average Abnormal Returns**

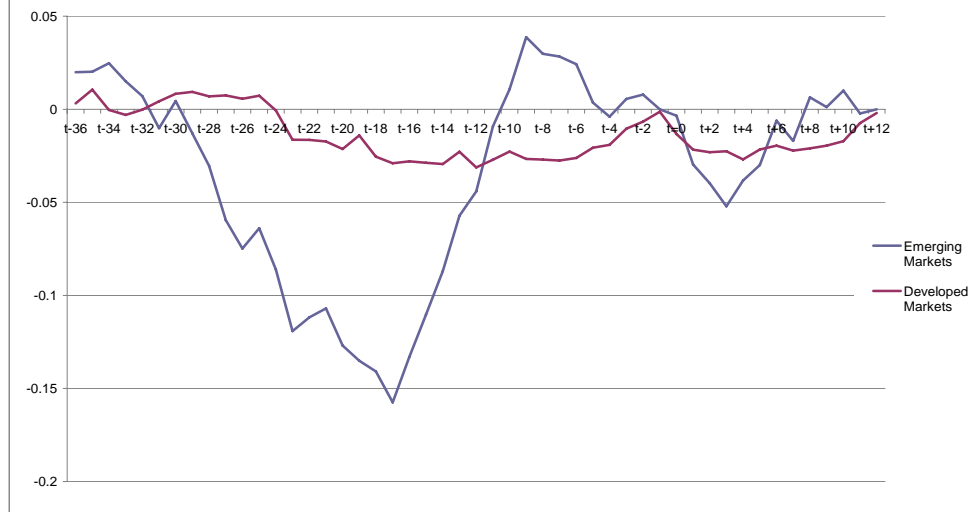


**Figure 8: Peer Group-Adjusted Emerging Market vs. Developed Market Funds Cumulative Average Abnormal Returns**



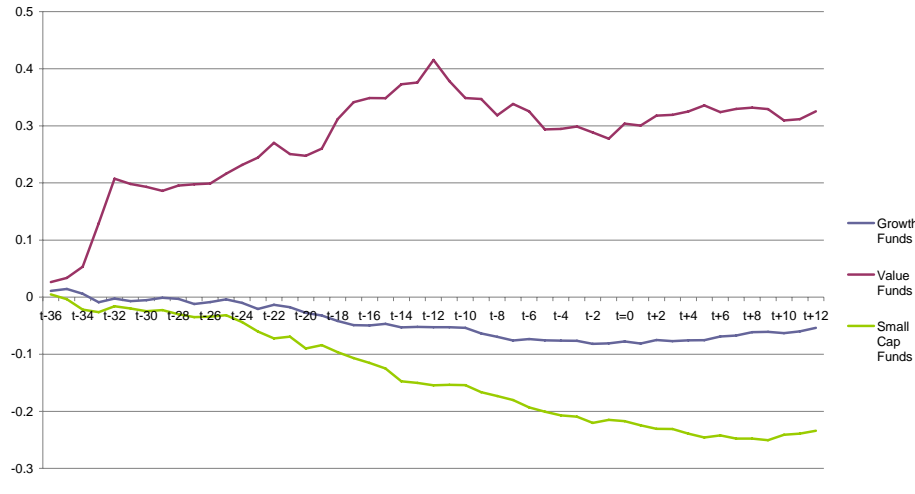
Event Time

**Figure 9: Emerging vs. Developed Markets Funds - Mean Adjusted Cumulative Average Abnormal Returns**

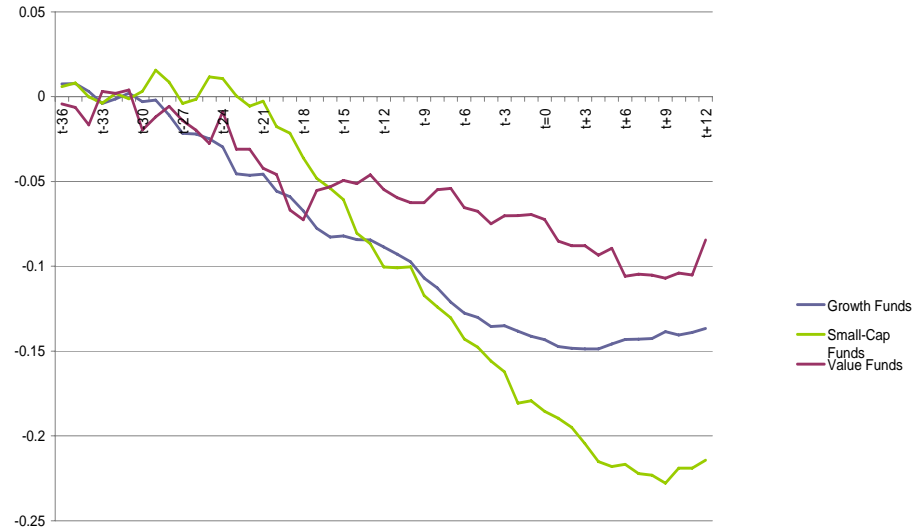


# The Findings – Value, Growth and Small Cap Funds

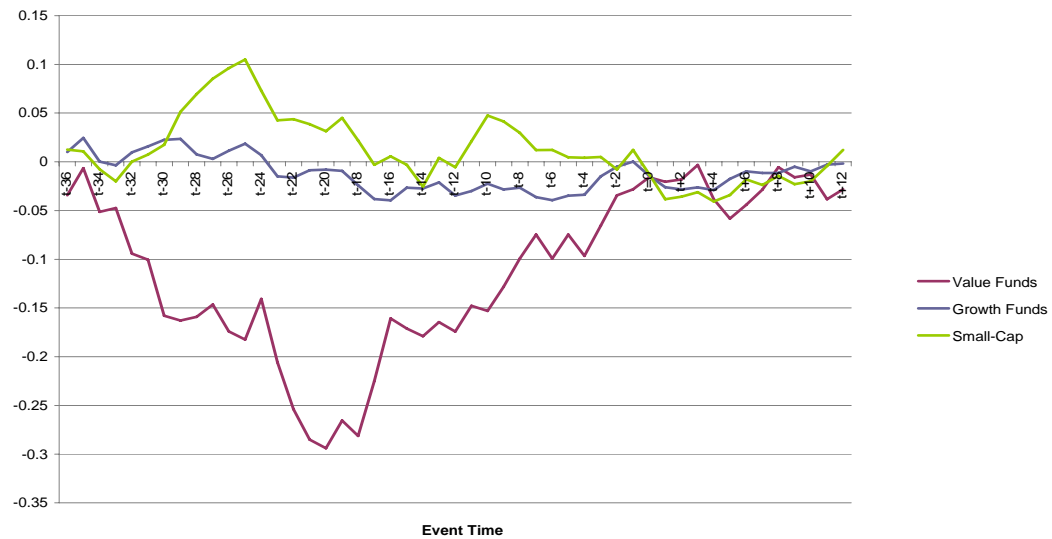
**Figure 10: Value, Growth and Small Cap Funds - Benchmark Adjusted Cumulative Average Abnormal returns**



**Figure 11: Value, Growth and Small-Cap Funds - Peer Group-Adjusted Cumulative Average Abnormal Returns**



**Figure 12: Value, Growth and Small-Cap Funds - Mean Adjusted Cumulative Average Abnormal Returns**



# The Findings – Top 10% vs. Bottom 10% of Funds

Figure 13: Benchmark Adjusted Cumulative Average Abnormal Returns - Top 10% of Funds according to pre-event IR

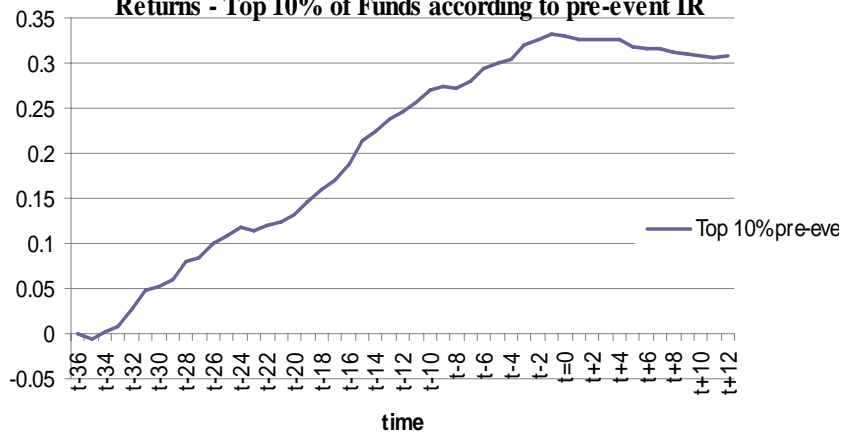
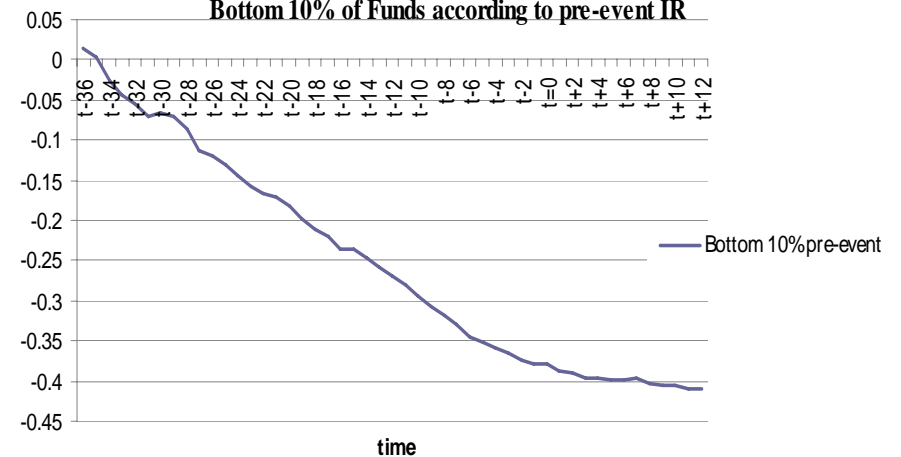


Figure 14: Benchmark Adjusted Cumulative Average Abnormal Returns - Bottom 10% of Funds according to pre-event IR



- The performance of the past winners does not persist: manager's portfolio decisions continue to have a positive impact after they have left, but eventually this positive influence disappears
- The performance of the 'loser' funds continues to persist in the post-event period: the returns persist to decline but at a lower diminishing rate

# The Findings - Information Ratio

**Table 1: Information Ratio Summary**

	Average Tracking Error		Average Abnormal Return		Information Ratio		Sum Average Abnormal Return	
	Pre-event	Post-event	Pre-event	Post-event	Pre-event	Post-event	Pre-event	Post-event
<b>Total Sample</b>	0.0248	0.0175	-0.0016	-0.0004	-0.0655	-0.0853	-0.0531	-0.0042
<b>Male</b>	0.0243	0.0176	-0.0015	-0.0004	-0.0576	-0.0789	-0.0476	-0.0054
<b>Female</b>	0.0279	0.0171	-0.0025	-0.0001	-0.1269	-0.1239	-0.0805	0.0013
<b>Emerging Markets</b>	0.0271	0.0177	0.0001	0.0005	-0.0052	0.0205	0.0032	0.0114
<b>Developed Markets</b>	0.0247	0.0175	-0.0017	-0.0004	-0.0699	-0.0927	-0.0579	-0.0054
<b>Value</b>	0.0313	0.0158	0.0033	0.0009	0.0622	0.1134	0.1782	0.0254
<b>Growth</b>	0.0275	0.0189	-0.0023	0.0013	-0.0582	0.0337	-0.0848	0.0192
<b>Small</b>	0.0355	0.0239	-0.0067	-0.0013	-0.1239	-0.0789	-0.2105	-0.0181

- There is an overall improvement in information ratios across most groups of funds. The exception are male managed and developed market funds which outnumber other funds and therefore influence the information ratio for the total sample, which exhibits a decrease of 0.02 after the manager change



# Summary of Findings

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- Performance of the funds in our sample broadly improves following a change in manager regardless of the method used
- Performance of those funds managed by women is more volatile during the pre-event period, and it improves on the average after the female fund manager has been replaced
- There is greater persistence in out-performance across emerging market funds than the developed market ones
- Small cap and growth equity funds improve their performance after the manager change
- Persistence in performance is more pronounced among 'loser' rather than 'winner' funds